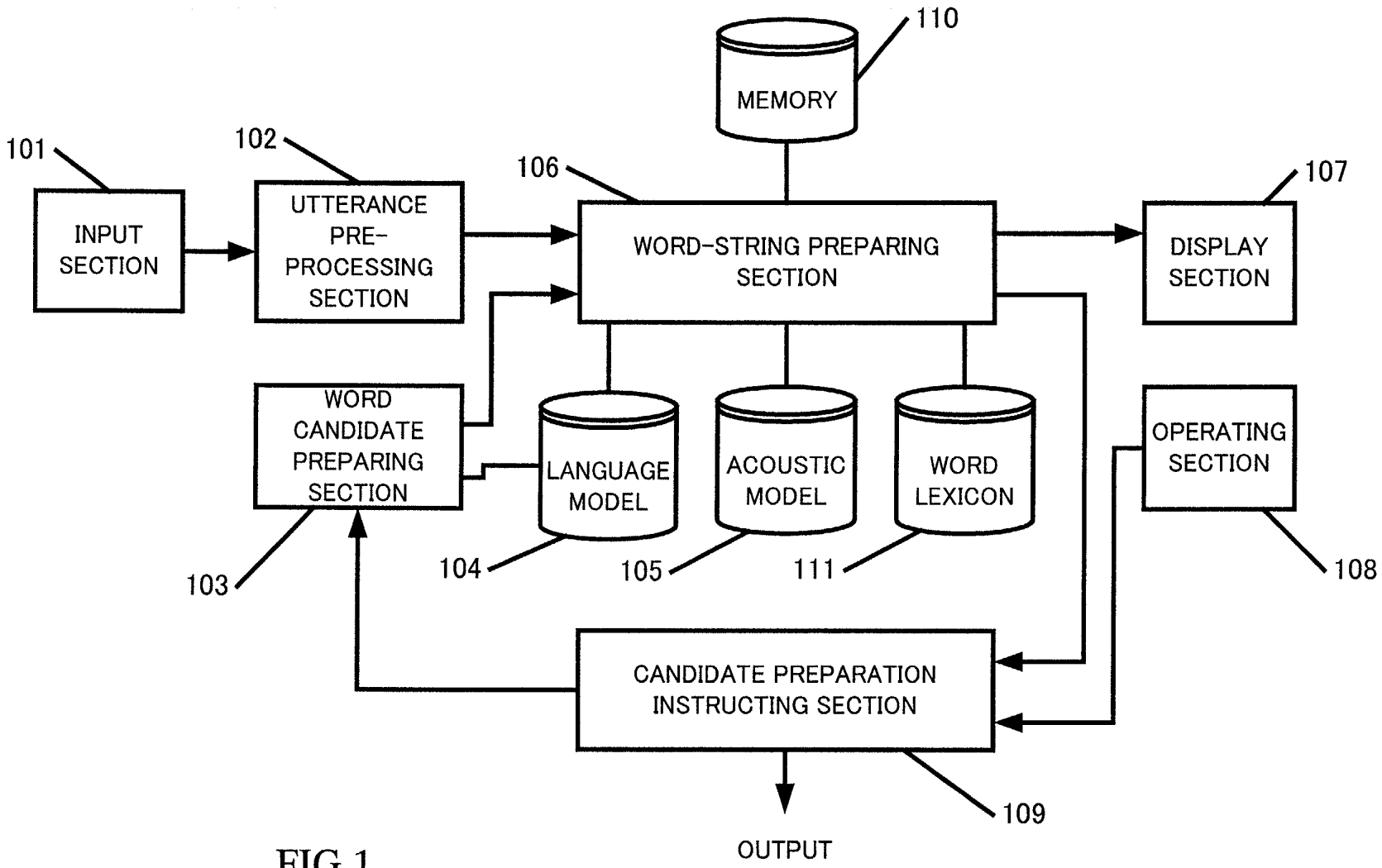

MEMORY
110
101
INPUT SECTION
102
UTTERANCE PRE-PROCESSING SECTION
106
WORD-STRING PREPARING SECTION
107
DISPLAY SECTION
WORD CANDIDATE PREPARING SECTION
LANGUAGE MODEL
ACOUSTIC MODEL
WORD LEXICON
OPERATING SECTION
103
104
105
111
108
CANDIDATE PREPARATION INSTRUCTING SECTION
109
OUTPUT

FIG.1

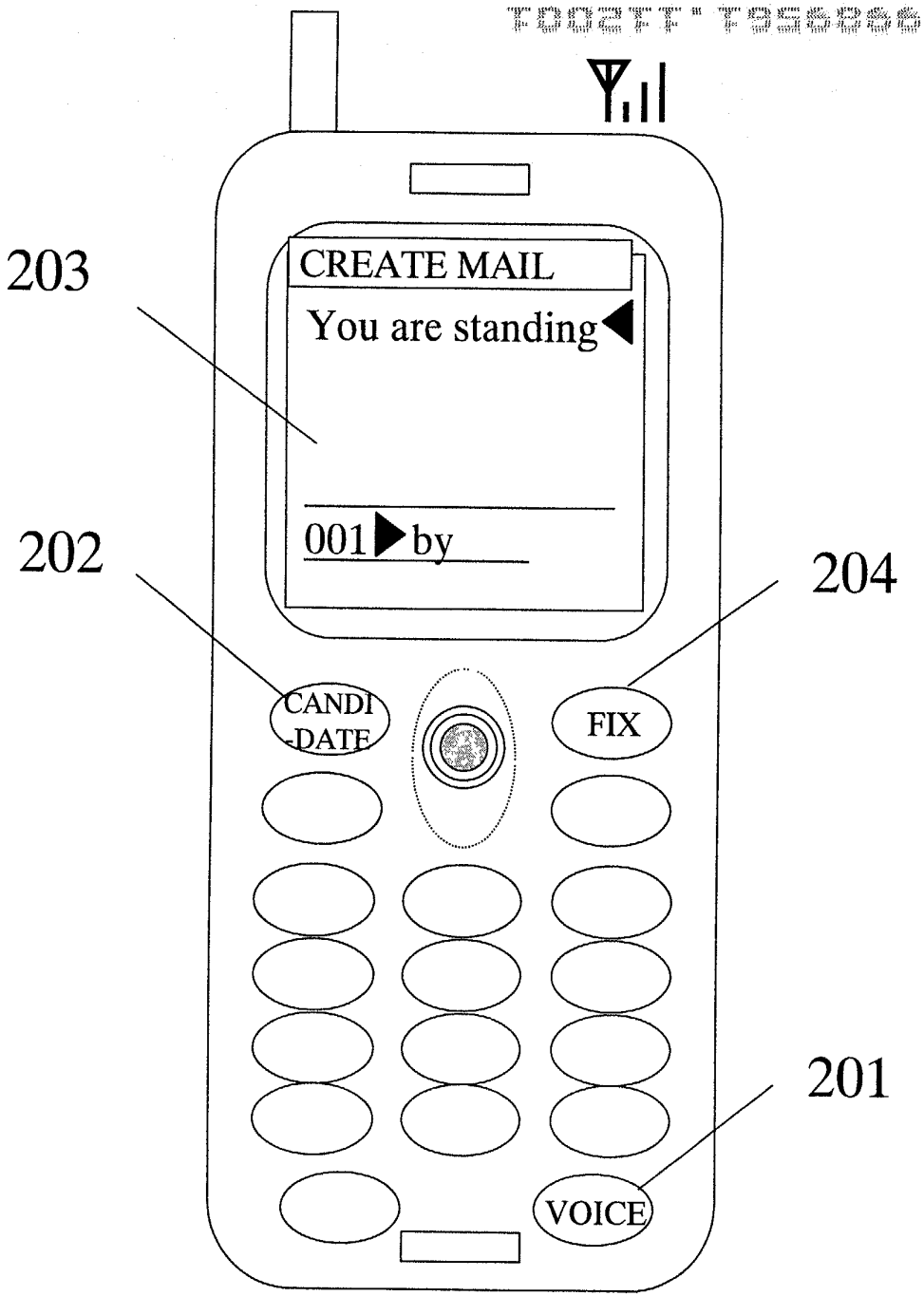

CREATE MAIL
You are standing
001 by
CANDI DATE
FIX
VOICE
203
202
204
201

FIG.2

TOP2TF "T3568640

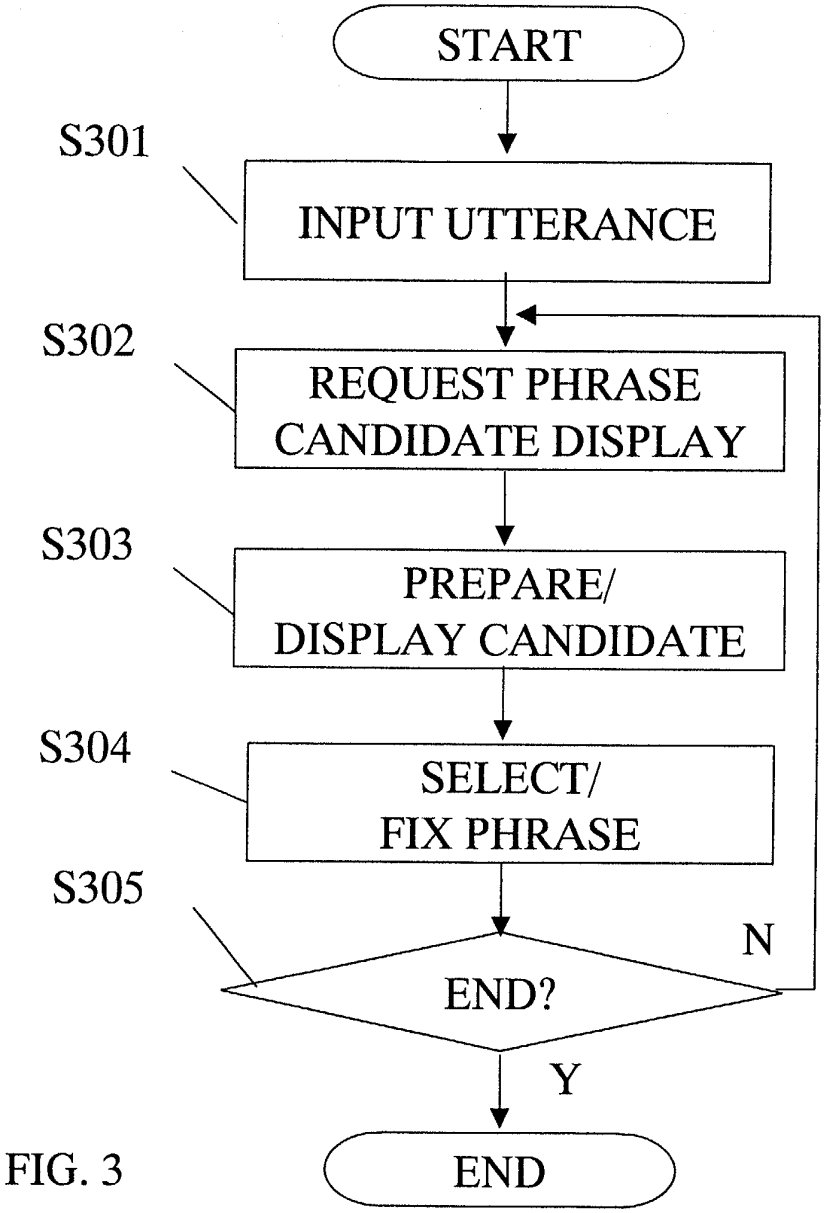


FIG. 3

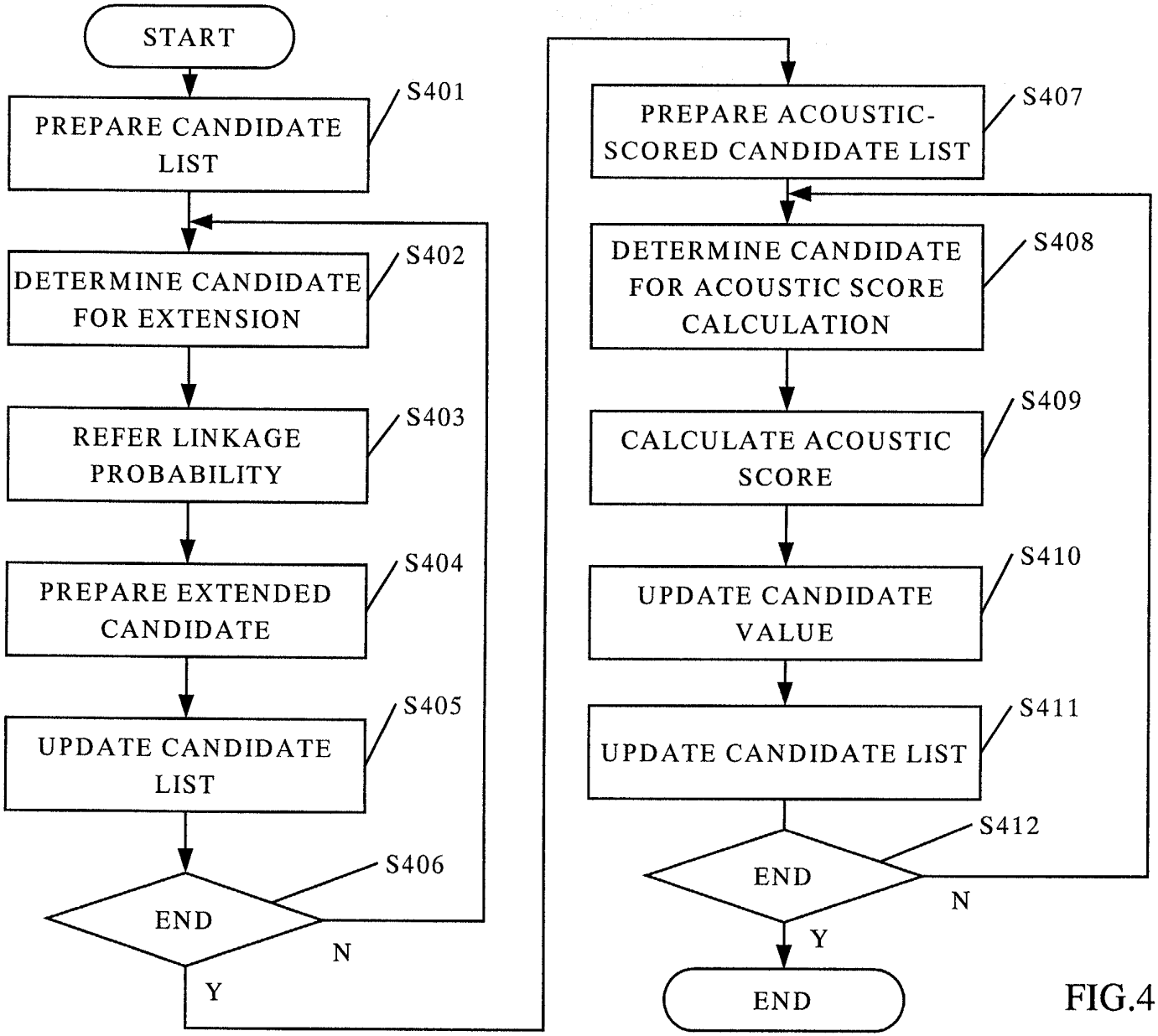

START
PREPARE CANDIDATE LIST
S401
DETERMINE CANDIDATE FOR EXTENSION
S402
REFER LINKAGE PROBABILITY
S403
PREPARE EXTENDED CANDIDATE
S404
UPDATE CANDIDATE LIST
S405
END
S406
N
Y
PREPARE ACOUSTIC-SCORED CANDIDATE LIST
S407
DETERMINE CANDIDATE FOR ACOUSTIC SCORE CALCULATION
S408
CALCULATE ACOUSTIC SCORE
S409
UPDATE CANDIDATE VALUE
S410
UPDATE CANDIDATE LIST
S411
END
S412
N
Y
END

FIG.4

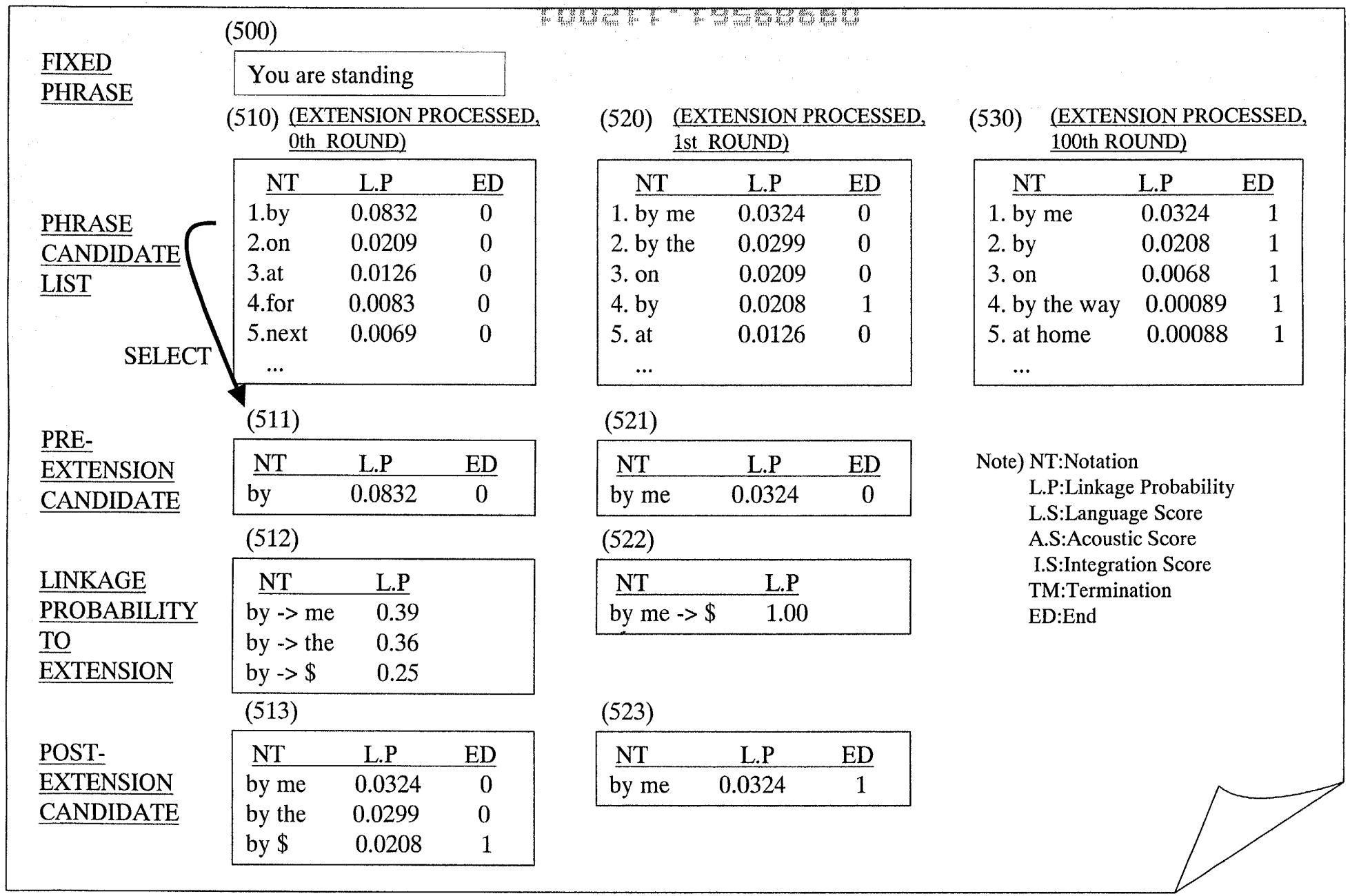

(500)
FIXED PHRASE
You are standing
(510) (EXTENSION PROCESSED, 0th ROUND)
NT L.P ED
1.by 0.0832 0
2.on 0.0209 0
3.at 0.0126 0
4.for 0.0083 0
5.next 0.0069 0
...
(520) (EXTENSION PROCESSED, 1st ROUND)
NT L.P ED
1. by me 0.0324 0
2. by the 0.0299 0
3. on 0.0209 0
4. by 0.0208 1
5. at 0.0126 0
...
(530) (EXTENSION PROCESSED, 100th ROUND)
NT L.P ED
1. by me 0.0324 1
2. by 0.0208 1
3. on 0.0068 1
4. by the way 0.00089 1
5. at home 0.00088 1
...
PHRASE CANDIDATE LIST
SELECT
(511)
PRE-EXTENSION CANDIDATE
NT L.P ED
by 0.0832 0
(521)
NT L.P ED
by me 0.0324 0
Note) NT:Notation
L.P:Linkage Probability
L.S:Language Score
A.S:Acoustic Score
I.S:Integration Score
TM:Termination
ED:End
(512)
LINKAGE PROBABILITY TO EXTENSION
NT L.P
by -> me 0.39
by -> the 0.36
by -> $ 0.25
(522)
NT L.P
by me -> $ 1.00
(513)
POST-EXTENSION CANDIDATE
NT L.P ED
by me 0.0324 0
by the 0.0299 0
by $ 0.0208 1
(523)
NT L.P ED
by me 0.0324 1

FIG. 5

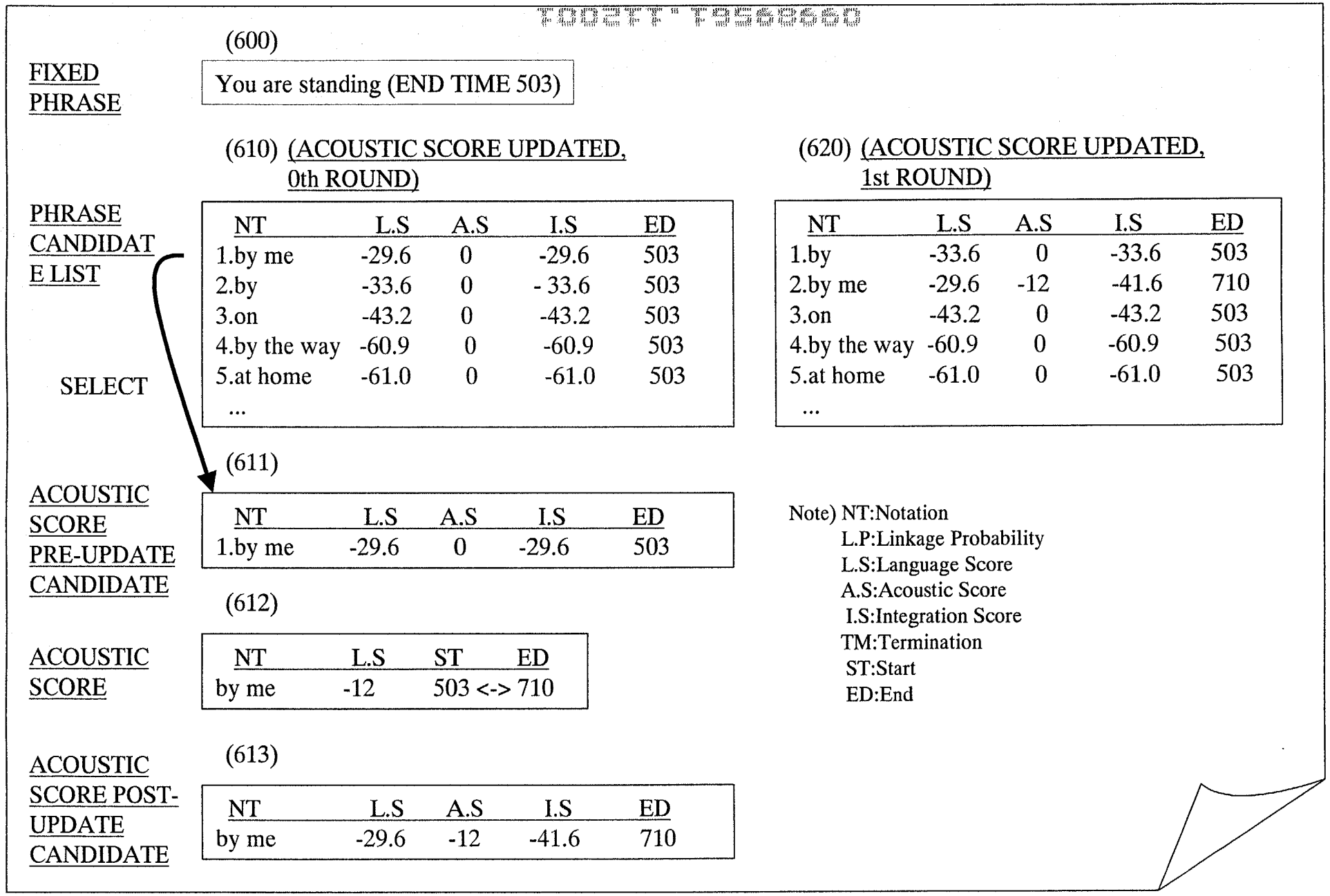

(600)
FIXED PHRASE
You are standing (END TIME 503)
(610) (ACOUSTIC SCORE UPDATED, 0th ROUND)
(620) (ACOUSTIC SCORE UPDATED, 1st ROUND)
PHRASE CANDIDATE LIST
SELECT
NT L.S A.S I.S ED
1.by me -29.6 0 -29.6 503
2.by -33.6 0 - 33.6 503
3.on -43.2 0 -43.2 503
4.by the way -60.9 0 -60.9 503
5.at home -61.0 0 -61.0 503
...
NT L.S A.S I.S ED
1.by -33.6 0 -33.6 503
2.by me -29.6 -12 -41.6 710
3.on -43.2 0 -43.2 503
4.by the way -60.9 0 -60.9 503
5.at home -61.0 0 -61.0 503
...
(611)
ACOUSTIC SCORE PRE-UPDATE CANDIDATE
NT L.S A.S I.S ED
1.by me -29.6 0 -29.6 503
(612)
ACOUSTIC SCORE
NT L.S ST ED
by me -12 503 <-> 710
(613)
ACOUSTIC SCORE POST-UPDATE CANDIDATE
NT L.S A.S I.S ED
by me -29.6 -12 -41.6 710
Note) NT:Notation
L.P:Linkage Probability
L.S:Language Score
A.S:Acoustic Score
I.S:Integration Score
TM:Termination
ST:Start
ED:End

FIG. 6

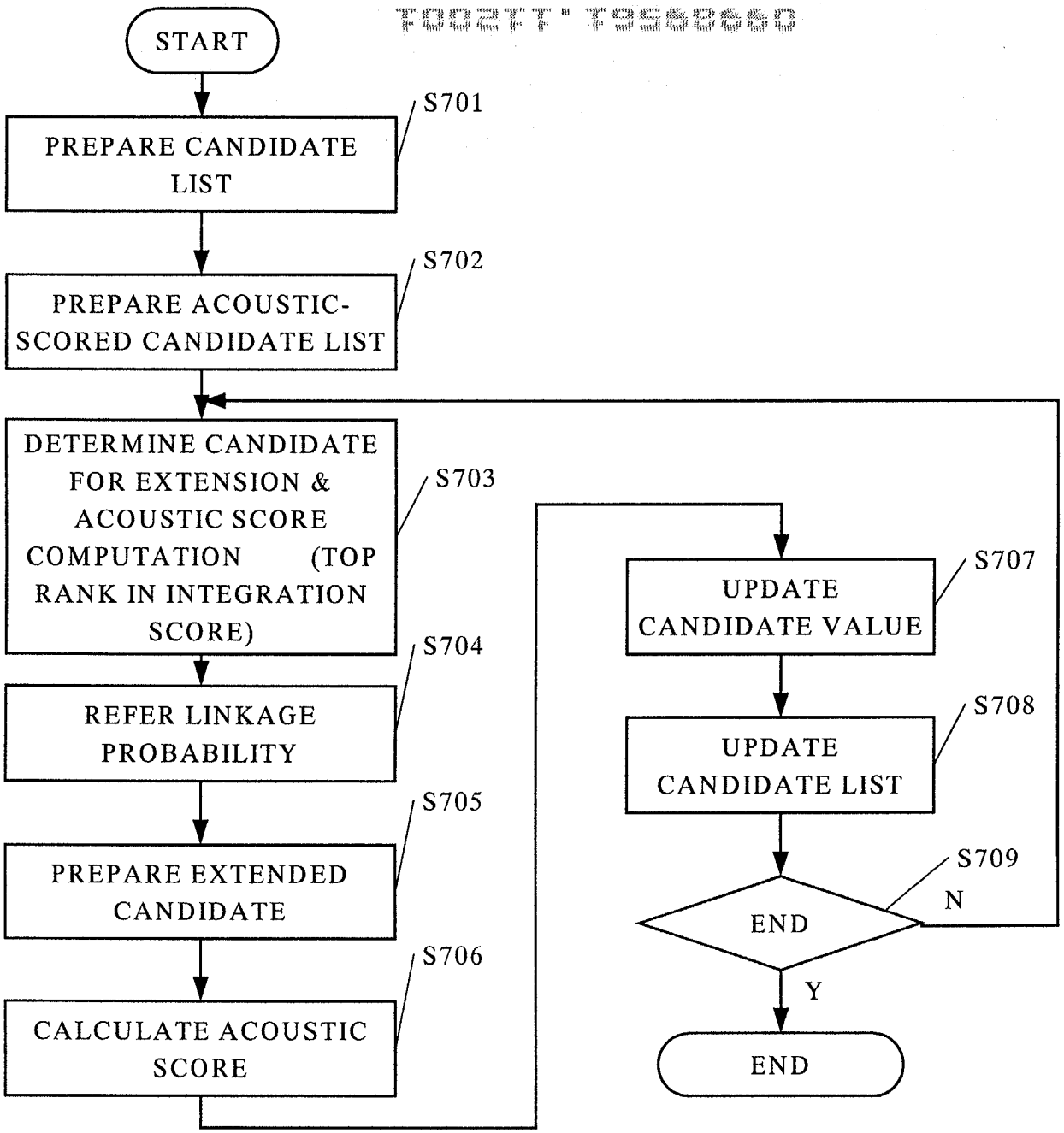

START
S701
PREPARE CANDIDATE LIST
S702
PREPARE ACOUSTIC-SCORED CANDIDATE LIST
DETERMINE CANDIDATE FOR EXTENSION & ACOUSTIC SCORE COMPUTATION (TOP RANK IN INTEGRATION SCORE)
S703
S704
REFER LINKAGE PROBABILITY
S705
PREPARE EXTENDED CANDIDATE
S706
CALCULATE ACOUSTIC SCORE
S707
UPDATE CANDIDATE VALUE
S708
UPDATE CANDIDATE LIST
S709
END
N
Y
END

FIG.7

FIXED PHRASE

(500)

You are standing (END TIME 503)

Note) NT:Notation
L.P:Linkage Probability
L.S:Language Score
A.S:Acoustic Score
I.S:Integration Score
TM:Termination
ED:End

(801) (INITIAL CANDIDATE LIST)

NT	L.P	ED
1.by	0.0832	
2.on	0.0209	
3.at	0.0126	
4.for	0.0083	
5.next	0.0069	
...		

(803) (EXTENSION PROCESSED, 1st ROUND)

NT	L.S	A.S	I.S	TM	ED
1. by me	-29.6	0	-29.6	503	0
2. by the	-30.4	0	-30.4	503	0
3. on	-33.4	0	-33.4	503	0
4. by	-33.6	0	-33.6	503	1
5. at	-37.8	0	-37.8	503	0
...					

(805) (EXTENSION PROCESSED, 100th ROUND)

NT	L.S	A.S	I.S	TM	ED
1. by	-33.6	-06	-39.6	604	1
2. by me	-29.6	-12	-41.6	710	1
3. on	-43.2	-46	-89.2	597	1
4. by the way	-60.9	-34	-94.9	843	1
5. at home	-61.0	-80	-141	832	1
...					

(802) (ACOUSTIC-SCORED CANDIDATE LIST)

NT	L.S	A.S	I.S	TM	ED
1.by	-21.4	0	-21.4	503	0
2.on	-33.4	0	-33.4	503	0
3.at	-37.8	0	-37.8	503	0
4.for	-41.6	0	-41.6	503	0
5.next	-43.2	0	-43.2	503	0
...					

(804) (ACOUSTIC SCORE UPDATED, 1st ROUND)

NT	L.S	A.S	I.S	TM	ED
1. by the	-30.4	0	-30.4	503	0
2. on	-33.4	0	-33.4	503	0
3. by	-33.6	0	-33.6	503	1
4. at	-37.8	0	-37.8	503	0
5. by me	-29.6	-12	-41.6	710	0
...					

(806) (ACOUSTIC SCORE UPDATED, 100th ROUND)

NT	L.S	A.S	I.S	TM	ED
1. by	-33.6	-06	-39.6	604	1
2. by me	-29.6	-12	-41.6	710	1
3. on	-43.2	-46	-89.2	597	1
4. by the way	-60.9	-34	-94.9	843	1
5. at home	-61.0	-80	-141	832	1
...					

FIG. 8

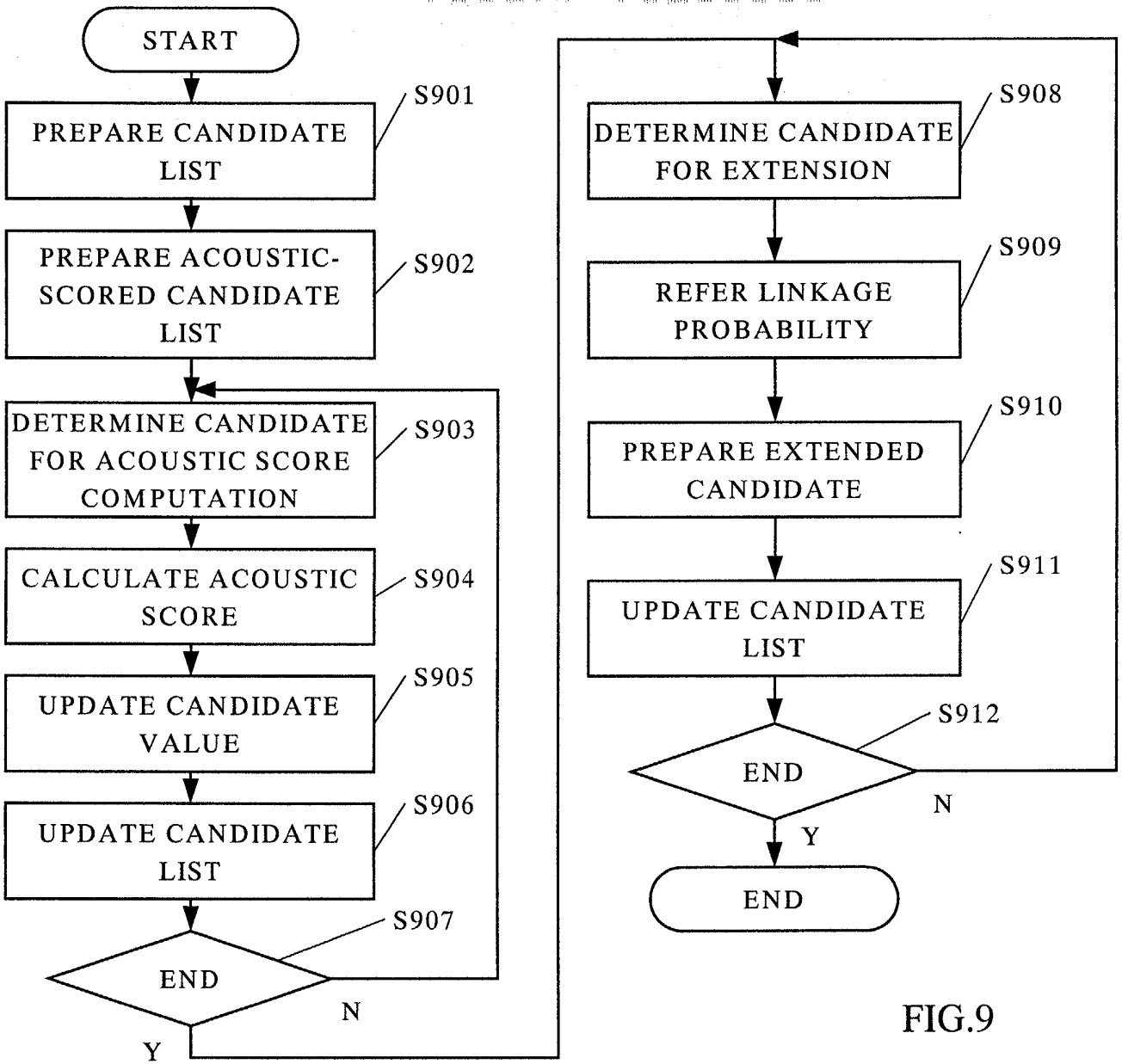
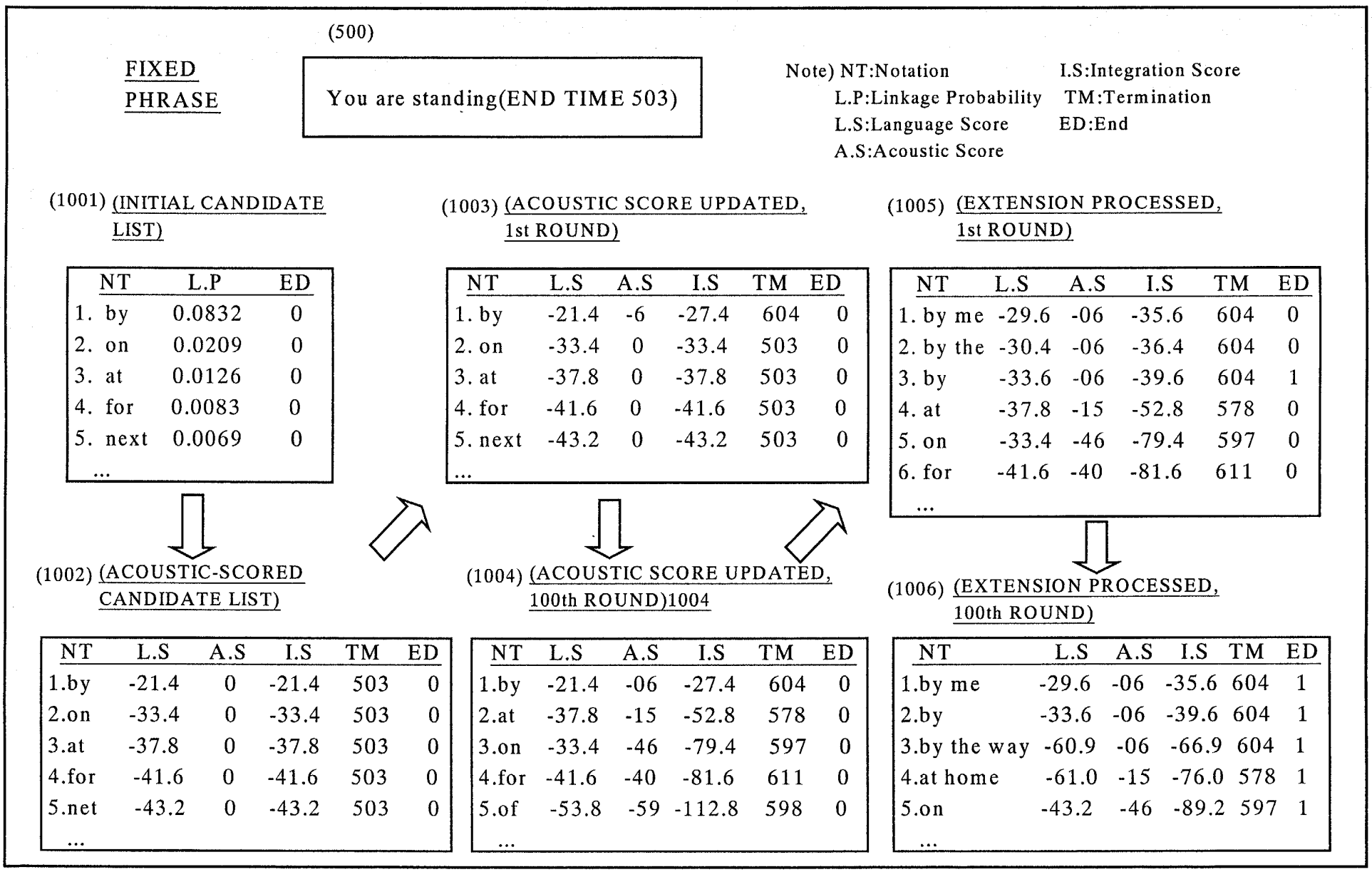

START
PREPARE CANDIDATE LIST
S901
PREPARE ACOUSTIC-SCORED CANDIDATE LIST
S902
DETERMINE CANDIDATE FOR ACOUSTIC SCORE COMPUTATION
S903
CALCULATE ACOUSTIC SCORE
S904
UPDATE CANDIDATE VALUE
S905
UPDATE CANDIDATE LIST
S906
END
S907
N
Y
DETERMINE CANDIDATE FOR EXTENSION
S908
REFER LINKAGE PROBABILITY
S909
PREPARE EXTENDED CANDIDATE
S910
UPDATE CANDIDATE LIST
S911
END
S912
N
Y
END

FIG.9



NT	L.P	ED
1. by	0.0832	0
2. on	0.0209	0
3. at	0.0126	0
4. for	0.0083	0
5. next	0.0069	0
...		

NT	L.S	A.S	I.S	TM	ED
1. by	-21.4	-6	-27.4	604	0
2. on	-33.4	0	-33.4	503	0
3. at	-37.8	0	-37.8	503	0
4. for	-41.6	0	-41.6	503	0
5. next	-43.2	0	-43.2	503	0
...					

NT	L.S	A.S	I.S	TM	ED
1. by me	-29.6	-06	-35.6	604	0
2. by the	-30.4	-06	-36.4	604	0
3. by	-33.6	-06	-39.6	604	1
4. at	-37.8	-15	-52.8	578	0
5. on	-33.4	-46	-79.4	597	0
6. for	-41.6	-40	-81.6	611	0
...					

NT	L.S	A.S	I.S	TM	ED
1.by	-21.4	0	-21.4	503	0
2.on	-33.4	0	-33.4	503	0
3.at	-37.8	0	-37.8	503	0
4.for	-41.6	0	-41.6	503	0
5.net	-43.2	0	-43.2	503	0
...					

NT	L.S	A.S	I.S	TM	ED
1.by	-21.4	-06	-27.4	604	0
2.at	-37.8	-15	-52.8	578	0
3.on	-33.4	-46	-79.4	597	0
4.for	-41.6	-40	-81.6	611	0
5.of	-53.8	-59	-112.8	598	0
...					

NT	L.S	A.S	I.S	TM	ED
1.by me	-29.6	-06	-35.6	604	1
2.by	-33.6	-06	-39.6	604	1
3.by the way	-60.9	-06	-66.9	604	1
4.at home	-61.0	-15	-76.0	578	1
5.on	-43.2	-46	-89.2	597	1
...					

FIG. 10

(500)

FIXED PHRASE

You are standing(END TIME 503)

Note) NT:Notation I.S:Integration Score
L.P:Linkage Probability TM:Termination
L.S:Language Score ED:End
A.S:Acoustic Score

(1101) (INITIAL CANDIDATE LIST)

NT	L.P	ED
1.by	0.0832	0
2.on	0.0209	0
3.at	0.0126	0
4.for	0.0083	0
5.next	0.0069	0
...		

(1102) (ACOUSTIC-SCORED CANDIDATE LIST)

NT	L.S	A.S	I.S	TM	ED
1.by	-21.4	0	-21.4	503	0
2.on	-33.4	0	-33.4	503	0
3.at	-37.8	0	-37.8	503	0
4.for	-41.6	0	-41.6	503	0
5.next	-43.2	0	-43.2	503	0
...					

(1103) (ACOUSTIC SCORE UPDATED, 1st ROUND)

NT	L.S	A.S	I.S	TM	ED
1. by	-21.4	-6	-27.4	604	0
2. on	-33.4	0	-33.4	503	0
3. at	-37.8	0	-37.8	503	0
4. for	-41.6	0	-41.6	503	0
5. next	-43.2	0	-43.2	503	0
...					

(1104) (ACOUSTIC SCORE UPDATED, 100th ROUND)

NT	L.S	A.S	I.S	TM	ED
1.by	-21.4	-06	-27.4	604	0
2.at	-37.8	-15	-52.8	578	0
3.on	-33.4	-46	-79.4	597	0
4.for	-41.6	-40	-81.6	611	0
5.of	-53.8	-59	-112.8	598	0
...					

(1105) (EXTENSION PROCESSED, 1st ROUND)

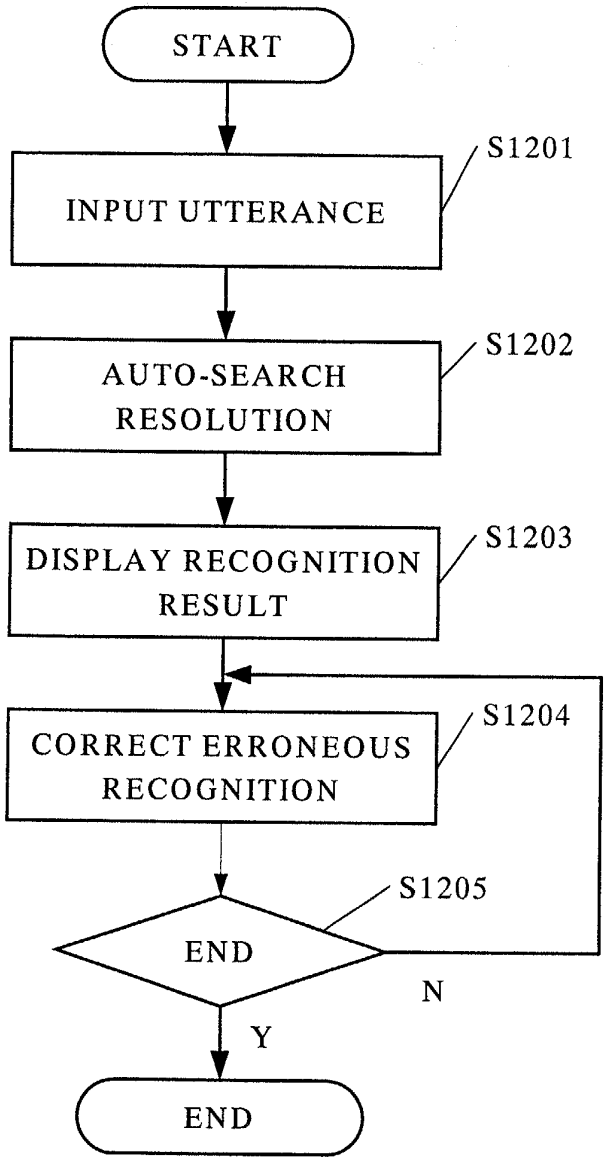
NT	L.S	A.S	I.S	TM	ED
1. by	-33.6	-06	-39.6	604	1
2. by me	-29.6	-12	-41.6	710	0
3. by the	-30.4	-22	-52.4	696	0
4. at	-37.8	-15	-52.8	578	0
5. on	-33.4	-46	-79.4	597	0
...					

(1106) (EXTENSION PROCESSED, 100th ROUND)

NT	L.S	A.S	I.S	TM	ED
1. by	-33.6	-06	-39.6	604	1
2. by me	-29.6	-12	-41.6	710	1
3. on	-43.2	-46	-89.2	597	1
4. by the way	-60.9	-34	-94.9	843	1
5. at home	-61.0	-80	-141	832	1
...					

FIG. 11

FOR2TT" T9S&9560



PRIOR ART

FIG.12